What Is Claimed Is:

1. A catalyst comprising 0.1 to 5% by weight of vanadium, 1 to 12% by weight of any metal from 6A family and 0.1 to 10% by weight of Ag in 70 to 99% by weight of titania useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

2. The catalyst according to claim 1, wherein the catalyst undergoes further acid-treatment useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

3. The catalyst according to claim 2, wherein the acid-treatment is conducted by impregnating said catalyst in 0.05 to 1M aqueous sulfuric acid solution and drying and calcinating the impregnated catalyst, or by passing by sulfur dioxide onto said catalyst useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

4. The catalyst according to any one of claims 1 to 3, wherein said titania has any one crystal structure selected from a group consisting of amorphous type, anatase type and rutile type crystal structures useful to remove the aromatic

halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

5. The catalyst according to any one of claims 1 to 3, wherein said 6A metal is any one selected from a group consisting of molybdenum, tungsten and chromium useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

6. The catalyst according to any one of claims 1 to 3, wherein said Ag is any one selected from a group consisting of silver nitrate, silver chloride, silver sulfate or a combinations thereof useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

7. The catalyst according to any one of claims 1 to 3, wherein said catalyst is supported by a structure selected from a group consisting of metallic panel, bag filter, ceramic filter, ceramic honeycomb and ceramic corrugate honeycomb useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.

8. The catalyst according to any one of claims 1 to 3, wherein said catalyst is molded to form any one selected from a

group consisting of sphere, pellet and honeycomb useful to remove the aromatic halogenated compounds comprising dioxin, carbon monoxide and nitrogen oxides simultaneously.